In the claims:

 (Previously Presented) An N-[(piperazinyl)hetaryl]arylsulfonamide compound of the general formula I

$$R^{1}-N \longrightarrow N-Q-R-SO_{2}-Ar \qquad (I)$$

$$(R^{2})_{n}$$

in which

- R is oxygen, a group N-R³ or a group CR^{3a}R^{3b};
- Q is a bivalent, 6-membered heteroaromatic radical selected from pyridindiyl and pyrimidindiyl, and which optionally carries one or two substituents R^a which is/are selected, independently of each other, from halogen, CN, NO₂, CO₂R⁴, COR⁵, C₁-C₄-alkyl, C₁-C₄-alkoxy, C₁-C₄-haloalkyl, NH₂, NHR⁶, NR⁶R⁷ and C₁-C₄-haloalkoxy;
- is phenyl or a 6-membered heteroaromatic radical selected from pyridinyl and pyrimidinyl, and which carries one or two substituents R^b, which is/are selected from halogen, NO₂, CN, CO₂R⁴, COR⁵, NHR⁶, NR⁶R⁷, C₁-C₆-alkyl, C₁-C₆-haloalkyl, C₁-C₆-alkoxy, C₁-C₆-haloalkoxy, C₂-C₆-alkenyl, C₂-C₆-alkynyl, C₃-C₆-cycloalkyl, C₃-C₆-cycloalkyl-C₁-C₄-alkyl and C₁-C₄-haloalkyl, with it also being possible for two radicals R^b which are bonded to adjacent C atoms of Ar to be together C₃-C₄-alkylene;
- n is 0, 1 or 2;
- R¹ is hydrogen, C_1 - C_4 -alkyl, C_1 - C_4 -haloalkyl, C_3 - C_6 -cycloalkyl, C_3 - C_6 -cycloalkyl- C_1 - C_4 -alkyl, C_1 - C_4 -hydroxyalkyl, C_1 - C_4 -alkoxy- C_1 - C_4 -alkyl, C_3 - C_4 -alkenyl or C_3 - C_4 -alkynyl;
- R^2 is C_1 - C_4 -alkyl or, together with R^1 , is C_2 - C_5 -alkylene or, in the case of n = 2, the two radicals R^2 can together be C_1 - C_4 -alkylene;

- R³ is hydrogen or C₁-C₄-alkyl;
- R^{3a}, R^{3b} are, independently of each other, hydrogen or C₁-C₄-alkyl;
- R⁴ is C_1 - C_4 -alkyl, C_1 - C_4 -haloalkyl, C_2 - C_4 -alkenyl C_3 - C_6 -cycloalkyl, C_3 - C_6 -cycloalkyl, C_1 - C_4 -alkyl, phenyl or benzyl; and
- R⁵ is hydrogen, C₁-C₄-alkyl, C₁-C₄-haloalkyl, C₂-C₄-alkenyl C₃-C₆-cycloalkyl, C₃-C₆-cycloalkyl, C₃-C₆-cycloalkyl, C₁-C₄-alkyl, phenyl or benzyl;
- R⁶, R⁷ are each independently selected from C₁-C₄-alkyl, C₁-C₄-haloalkyl or together with the nitrogen to which they are bound form a saturated 3-, 4-, 5- or 6-membered heterocycle, which additionally may comprise an oxygen atom or an additional nitrogen atom as a ring member and which may carry 1, 2, 3 or 4 C₁-C₄ alkyl groups;

the N-oxides thereof and the physiologically tolerated acid addition salts of these compounds;

with the exception of the compounds: 4-methyl-N-[6-(4-methylpiperazin-1-yl)pyridin-3-yl)benzenesulfonamide and 4-chloro-N-[6-(4-methylpiperazin-1-yl)pyridin-3-yl)benzenesulfonamide.

- 2. (Original) The compound as claimed in claim 1, wherein R is N-R³ with R³ being H or C_1 - C_4 -alkyl.
- 3. (Previously Presented) The compound as claimed in claim 2, wherein
 - Q is a bivalent, 6-membered heteroaromatic radical selected from pyridindiyl and pyrimidindiyl, and which optionally carries one or two substituents R^a which is/are selected, independently of each other, from halogen, CN, NO₂, CO₂R⁴, COR⁵, C₁-C₄-alkyl and C₁-C₄-haloalkyl and
 - Ar is phenyl or a 6-membered heteroaromatic radical selected from pyridinyl and pyrimidinyl, and which carries one or two substituents R^b, which is/are selected from halogen, NO₂, CN, CO₂R⁴, COR⁵, C₁-C₆-alkyl, C₂-C₆-alkenyl, C₂-C₆-alkynyl, C₃-C₆-cycloalkyl, C₃-C₆-cycloalkyl-C₁-C₄-alkyl and C₁-C₄-haloalkyl, with it also being

possible for two radicals R^b which are bonded to adjacent C atoms of Ar to be together C_3 - C_4 -alkylene.

- 4. (Original) The compound as claimed in claim 1, in which the piperazine ring is bonded to the heteroaromatic radical Q in the para position in relation to the group R-SO₂-Ar.
- 5. (Previously Presented) The compound as claimed in claim 1, in which Q is a radical of the formula

$$\begin{array}{c}
A_1 = A_2 \\
A_3 \\
(R^a)_k
\end{array}$$

one of the variables A_1 , A_2 or A_3 is N, the remaining two variables being CH or C-R^a, or A_1 and A_3 are N and A_3 is CH or C-R^a, k = 0 or 1 and R^a is selected from halogen, C_1 -C₄-alkyl, C_1 -C₄-haloalkyl, C_1 -C₄-alkoxy, NH₂, NHR⁶, NR⁶R⁷ and C_1 -C₄-haloalkoxy, with the proviso that k is 0 if two of the variables A_1 , A_2 and A_3 are C-R^a.

- 6. (Original) The compound as claimed in claim 5, in which A_3 is nitrogen, A_2 is CH and A_1 is N or CH and wherein the piperazine radical is located in the 2 position.
- 7. (Original) The compound as claimed in claim 6, in which Q is pyridin-2,5-diyl which carries the piperazine radical in the 2 position.
- 8. (Previously Presented) The compound as claimed in claim 5, in which Q is a radical of the formula

$$N$$
 R^a

in which A_1 is N or CH and A_2 is CH and R^a is selected from, C_1 - C_4 -alkoxy, NH₂, NHR⁶, NR⁶R⁷ and C_1 - C_4 -haloalkoxy.

- 9. (Previously Presented) The compound as claimed in claim 8, in which the piperazine radical is located in the 2 position.
- 10. (Previously Presented) The compound as claimed in claim 1, in which the radical Ar carries a substituent R^b in the para position and, optionally, a further substituent R^b in the meta position or in the ortho position, in each case based on the binding site of the sulfonamide group.
- 11. (Previously Presented) The compound as claimed in claim 1, in which Ar is phenyl or pyridyl, which radicals possess one or 2 R^b substituents.
- 12. (Previously Presented) The compound as claimed in claim 1, in which R¹ is not hydrogen or methyl.
- 13. (Previously Presented) The compound as claimed in claim 1 of the general formula la

$$R^{1}-N \xrightarrow{A_{1}^{=}A_{2}} N-SO_{2} \xrightarrow{X=Y} R^{b}$$
 (Ia)

in which n, R^1 , R^2 , R^3 , R^a and R^b have the meanings given in claim 1 and in which one of the variables A_1 , A_2 or A_3 is N, the remaining two variables being CH or C- R^a , or A_1 and A_3 are N and A_2 is CH or C- R^a , with the proviso that k is 0 if two of the variables A_1 , A_2 and A_3 are C- R^a ,

X and Y are selected from CH, C-R^{b'} and N, in which R^{b'} is halogen, methyl, CN, difluoromethyl or trifluoromethyl, with X and Y not simultaneously being N or simultaneously being C-R^{b'}, and

k is 0 or 1.

14. (Previously Presented) The compound of the formula Ia as claimed in claim 13, in which k = 0 and one of the variables A_1 , A_2 or A_3 is N, the remaining two variables being CH or A_1 and A_3 are N and A_2 is CH.

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- 15. (Original) The compound of the formula Ia as claimed in claim 14, in which A_1 is CH or N, A_2 is CH and A_3 is N.
- 16. (Original) The compound of the formula la as claimed in claim 13, in which k is 1, A₁ is CH or N, A₂ is CH and A₃ is N, and R^a is selected from , C₁-C₄-alkoxy, NH₂, NHR⁶, NR⁶R⁷ and C₁-C₄-haloalkoxy and R^a is bound to the carbon atom adjacent to A₃.
- 17. (Previously Presented) The compound of the formula la as claimed in claim 13, in which n is 0 or 1 and, in the case of n = 1, R² is bonded to the C atom of the piperazine ring which is adjacent to the group R¹-N and is a methyl group having the S configuration.
- 18. (Canceled)
- 19. (Canceled)
- 20. (Previously Presented) The compound of the formula Ia as claimed in claim 13, in which R¹ is not hydrogen or methyl.
- 21. (Previously Presented) The compound of the formula la as claimed in claim 13, of the general formula la.1

$$R^{1}-N \longrightarrow N \longrightarrow N-SO_{2} \longrightarrow R^{b} \qquad (Ia.1)$$

$$(R^{2})_{n} \qquad (R^{a})_{a}$$

in which n, X, Y, R^1 , R^2 , R^3 , R^a and R^b have the meanings given in claim 13 and q is 0, 1 or 2.

22. (Previously Presented) The compound of the formula la as claimed in claim 13, of the general formula la.2

$$R^{1}-N \longrightarrow N \longrightarrow N-SO_{2} \longrightarrow R^{5}$$

$$(R^{2})_{n} \qquad (R^{a})_{q} \qquad (Ia.2)$$

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in which n, X, Y, R^1 , R^2 , R^3 , R^a and R^b have the meanings given in claim 13 and q is 0 or 1.

- 23. (Currently Amended) A pharmaceutical composition which comprises at least one N-[(piperazinyl)hetaryl]arylsulfonamide compound as claimed in claim 1 and/or at least one physiologically tolerated acid addition salt of I and/or an N-oxide of I, optionally together with physiologically acceptable carriers and/or auxiliary substances.
- 24. (Canceled)
- 25. (Canceled)
- 26. (Canceled)
- 27. (Currently Amended) A method for treating a medical disorder susceptible to treatment with a dopamine D₃ receptor antagonist or a dopamine D₃ agonist selected from Parkinson's disease, and schizophrenia, cognitive disturbances, depression, anxiety, addiction, kidney function disturbances, eating disturbances and epilepsy, said method comprising administering an effective amount of at least one compound of the formula I of claim 1 to a subject in need thereof.
- 28. (Canceled)